

Bunker Hill Community College Sustainability Plan



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This Sustainability Plan has been reviewed and approved by (Robert Biswanger) of (Bunker Hill community College) on (May 1, 2005).

Signature of Agency Head or other Appropriate Designee

1. Agency Information, Impact Identification and Sustainability Team

1.1 Agency Description and Scope

Mission of Bunker Hill Community College

Bunker Hill Community College is a public institution of higher education offering programs and courses of study including Arts and Sciences, Nursing and Allied Health, Domestic and International Business, Hospitality and Culinary Arts, Early Childhood Development, and Computer Applications. The College supports open access to post-secondary education by providing a range of educational opportunities that include distance learning, self-directed learning and an Honors program. The College offers an entry-level assessment program for new incoming students, a sound foundation in developmental studies and, for non-native English speaking students, a variety of levels of English as a Second Language (ESL) instruction.

The student body reflects the diversity of the urban community, and an essential part of the College's mission is to encourage this diversity. The College seeks to become a national model for successfully incorporating the strengths of many cultures, ethnic backgrounds, age groups and learning styles into the curricular and extracurricular life of the institution.

Bunker Hill Community College seeks to enhance its position as a primary educational and economic asset for the Commonwealth through cooperative planning and program implementation involving neighboring institutions of higher education, the public schools, community organizations and area businesses and industries.

Bunker Hill Community Colleges main campus is located at 250 New Rutherford Ave. Charlestown, Massachusetts and its main satellite campus at 75 Hawthorn Street, Chelsea. The Charlestown campus

has over 360,000 square feet of space and 5 buildings that are all connected. The Chelsea campus has 1 building and 30,000 square feet of space.

Enrollment: more than 7,800 students the fall of 2004.

Employees: 341 full-time employees including 118 full time faculty fall 2004 and 242 adjunct faculty fall 2004.

1.2 Agency Impacts on the Environment and Human Health

The College is now operating 7 days a week from 7 am to 10 pm weekdays and shorter hours on the weekends. With the exception of student breaks BHCC offer's classes 12 months of the year and currently no weekends during the summer months. Due to the general nature of education, it is a very high consumer of paper and paper products; on average we consume more than 2200 cases of paper. With the colleges current waste disposal contract we are able to recycle paper of any type and color as well as cardboard. The EOE report (dated xxxxx) on recycling stated "BHCC manages the most comprehensive recycling program of any of the campuses studied", we are very fortunate to have the involvement of students and faculty to help us. The College is dual fueled using both natural gas and oil and we pay close attention to the market to lock in the best prices available.

BHCC has a fleet of 12 vehicles of which three are passenger vans and two are 40 passenger buses. The buses are new to the College and are used for a shuttle service between the Chelsea and Charlestown campuses. By utilizing the new buses in place of the 15 passenger vans for one of the daytime shuttles BHCC has reduced the number of required shuttle trips between campuses considerable. During the spring semester of 2004 preliminary estimates show a reduction by almost a third of fuel consumption even after taking into consideration the addition of diesel fuel for the buses. BHCC is currently looking at using the bus to replace the nighttime shuttle van as well but the savings will be minimal due to the limited number of runs. An increase in diesel fuel consumption is expected but the buses carry a larger number of students and get three times the mileage per gallon.

1.3 Agency Operational Costs

The following is a list of operational costs BHCC incurred for both Campuses for fiscal year 2004:

Electric	\$590,000.00 (due to the size of the campus we are able to direct purchase our electricity at very favorable rates but we have no control over the distribution side of electricity and find ourselves at the control of NSTAR)
Heating oil	\$132,000.00
Natural gas	\$122,305.00 (due to the size of the campus we are able to direct purchase our natural gas at very favorable rates but we have no control over the distribution side of natural gas and find ourselves at the control of Keyspan)
Water and sewage	\$95,257.00
Gasoline	\$7,113.00
Diesel	\$1,155.00
Hazardous waste	\$9,670.00
Non-hazardous waste	\$26,843.00
Janitorial services	\$482,000.00 (includes snow removal of walks, stairs and ice melt, Chelsea)
Vehicle Maintaince	\$16,832.00

1.4 Agency Sustainability Team Members

The BHCC Sustainability Team consists of Robert Steeper, Professor and Science Department Chair, Joseph Steffano, Director of Engineering Services, John Chirichiello Staff Assistant Chelsea Campus, Richard Pishkin, Staff Associate Auxiliary Services Business Office, Louise Miller-Finn, Information Technology and Robert Biswanger, Director of Facilities Management. Currently the team meets monthly on Fridays and were chosen because of the unique areas each over see.

2. Long-Term Goals/Vision

2.1 Long-Term Goals

Bunker Hill Community College has identified the following for long-term goals;

- 1) During the design stages of new buildings BHCC will investigate and try to incorporate energy management systems and LEED design.
- 2) As the College replaces older computer monitors new more energy efficient computer monitors will be evaluated, purchased and installed were feasible.
- 3) Start a program to recycle old printer and copier toner cartridges
- 4) Investigate and reduce water consumption.
- 5) Meet state mandate of 25% CO2 emission reduction by 2012

3. Short-term Actions and Priorities

3.1 Priority and Areas Goals

Bunker Hill Community College has identified the following for short-term actions;

- 1) Start a program of buying copy paper with at least 10% recycled content
- 2) Install energy efficient classroom lighting controls. Ceiling mounted motion activated sensors and motion activated wall switches in hallways. Install photovoltaic sensors in halls with windows to reduce electric lights and take advantage of natural lighting.
- 3) Install new motion activated light switches in various offices.
- 4) Activate the Energy Star Energy Management System on all College computer monitors.

Note: 2 and 3 are the same.

3.2 Agency Action Steps

Please refer to the attached Agency Sustainability Workplan Worksheet

4. Management Systems and Institutionalization

Integrating Environmental Impacts into Key Decision Points

Include Sustainability issues in planning processes when possible.

Open discussions on sustainability issues College wide.

Investigate new ideas and possibilities.

Implement new ideas where possible

4.1 Education and Training of Staff

The College has a faculty and staff newsletter published weekly September through May and biweekly June to August. Sustainability issues will be printed in the newsletter so that all faculty and staff are informed and kept updated.

4.2 Management Systems

As new ideas are identified and the decision to implement them made, the appropriate departments will be involved in the decision making process and asked to implement them as required.

5. Tracking Progress and Program/Plan Review

5.1 Agency Tracking and Reporting Form

The sustainability team will collect pertinent data yearly and submit findings as requested.

5.2 Continuous Improvement

The sustainability team will monitor the processes of each department or project to see if progress is being made and make possible suggestions to help the college meet its goals.

An open invite will be made so that interested individuals wishing to join the committee are welcomed and all interested parties and ideas listened to.

The sustainability team will hold regular meetings and processes will develop and evolve as needed.

All major recommendations will be submitted to senior staff for College wide assessment

Appendix 4 - Agency Sustainability Workplan Worksheet

For Use in Section 3 of the *Agency Plan Template* "Short Term Actions and Priorities" and should be submitted as part of the agency plan.

Sustainable Goal	Benefits	Specific Tasks	Responsible Staff	Timeline
1) Start a program of buying copy paper with at least 10% recycled content	Reduction of solid waste Save cost	Purchase paper with at least a 10% recycled content	Central Services	July 1, 05
2) Install energy efficient classroom lighting controls. Ceiling mounted motion activated sensors and motion activated wall switches. Install photovoltaic sensors in halls with windows to reduce electric lights and take advantage of natural lighting.	Reduction of wasted energy	Identify type of fixtures needed and purchase from state vendor Install controls in classrooms and hallways.	Facilities Management	Start during fiscal year 06 and do a multi year phase in due to cost. Add to all classrooms during any renovations.
3) Install new motion activated light switches in various offices.	Reduction of wasted energy	Identify type of fixtures needed and purchase from state vendor. Install switches in various offices.	Facilities Management	Program has started. As personnel move and offices vacated new lighting control switches are installed before the empty office is filled.
4) Activate the Energy Star Energy Management System on all college monitors.	Reduction of wasted energy	Identify all computer monitors that are not currently running the management system and activate same. Activate system.	Information Technology	All current and future computer monitors will be checked and system activated. On going now.